

MELEXERUS, A NEW GENUS PROPOSED FOR PSEUDANTHONOMUS HISPIDUS CHAMPION (COLEOPTERA: CURCULIONIDAE)¹

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ABSTRACT: *Melexerus* is described as a new monotypic genus containing *Pseudanthonomus hispidus* Champion. *Pseudanthonomus crinitus* Champion is synonymized with *hispidus* (NEW SYNONYMY). In addition to the generic description, the species is redescribed on the basis of a series of specimens. *Melexerus hispidus* is now known to occur in Cuba, El Salvador, Guatemala, Jamaica and Mexico. Photographs of the habitus are included and the male genitalia are illustrated.

The present paper represents a contribution to revision of the North and Central American weevils of the subfamily Anthonominae. Emphasis is presently being placed upon reviewing the status of each of the genus-group taxa in the subfamily. Several of the small supraspecific taxa of Anthonominae have already been treated (Burke 1964, 1968a, 1973, 1981a, 1981b; Burke and Ahmad 1967; Burke and Hafernik 1971). During the course of this continuing study it has been determined that the peculiar little weevil *Pseudanthonomus hispidus* Champion is not assignable to *Pseudanthonomus* Dietz or to any other described genus. While it is with some reluctance that I create another monotypic genus, there appears to be no other acceptable solution to the placement of the species. In addition to the description of the genus, some new synonymy is proposed and a revised description of *hispidus* is presented.

***Melexerus* Burke, New Genus**

Type Species: *Pseudanthonomus hispidus* Champion 1903:198, here designated.

Etymology: *Melexerus* is an arbitrary combination of letters and is considered here to be of masculine gender.

Description of Genus: Body above rather densely clothed with coarse, gray to ochreous scales intermixed on the dorsal surface, rostrum and legs with semierect to erect scattered, sharply pointed or bifid scales; length 1.7 - 2.1 mm. Rostrum moderately strongly curved in both sexes, slightly more so in females; equal in length to prothorax along dorsal midline in male and equal to or slightly longer than prothorax in female. Upper margin of lateral rostral groove well defined, extending against lower 1/3 of eye; lower margin of groove poorly defined. Funicle 6-segmented. Eyes strongly protuberant; height of eye equal to nearly 2 x width; separated in front by distance equal to width of rostrum at base. Head feebly constricted behind eyes. Prosternum with anterior margin slightly emarginate. Procoxae contiguous. Mesocoxae separated by distance equal to 3/4 width of a coxa. Mesosternum truncate posteriorly. Elytra at base distinctly broader than prothorax. Humeri strongly rounded.

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Abdominal sterna 3 and 4 *ca.* equal in length. Pygidium normally not exposed in either sex. Femora not strongly clavate; profemur bearing minute, sharply pointed tooth; mesofemur usually unarmed, occasionally with minute tooth; metafemur always unarmed. Tibiae short, straight, metatibia *ca.* 1/2 length of femur. Tibiae each bearing a minute apical mucro. Teeth on inside of tarsal claws each nearly as long as claw.

Discussion: *Melexerus hispidus* was originally placed in the genus *Pseudanthonomus* Dietz on the basis of the 6-segmented funicle and the upper margin of the lateral groove (referred to as "scrobe") extending against the lower anterior margin of the eye. This species is readily distinguished from the true *Pseudanthonomus* by the constricted head, erect scales on dorsum and legs, short tibiae, and protuberant and transverse eyes. Burke (1968b) mentioned that most of the species which Champion (1903) assigned to *Pseudanthonomus* on the basis of the 6-segmented funicle are not members of this genus; several will eventually be transferred to other genera, mainly *Anthonomus*. The vestiture of *M. hispidus* is similar to that of *Anthonomus* (*Anthonomochaeta*) *heterogenus* Dietz, a similarity also noted by Champion (1903). Otherwise the two species are quite different and do not appear to be especially closely related. *A. heterogenus* has a 7-segmented funicle, head not constricted, eyes round and not strongly protuberant, all femora unarmed, and tibiae nearly as long as the femora. The latter species also has the upper margin of the lateral rostral groove extending against the middle of the anterior margin of the eye while that of *M. hispidus* impinges on the lower margin of the eye. The erect scales on the elytra of *M. hispidus* are also much longer.

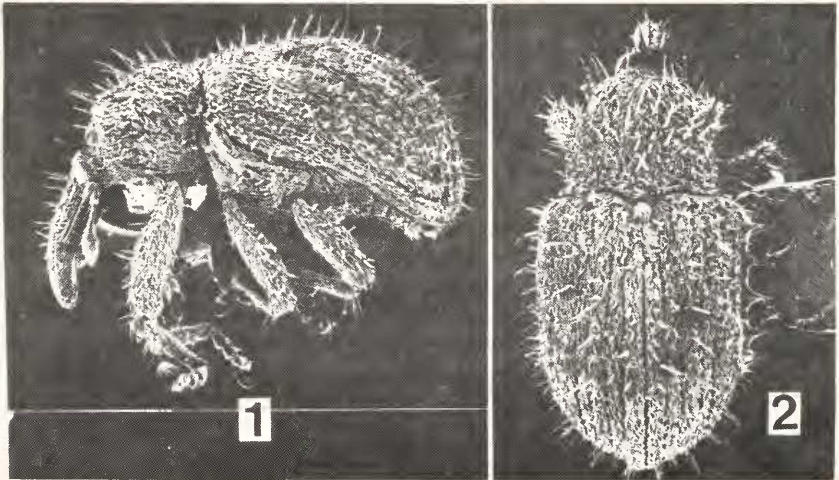


Fig. 1. Lateral view of male of *Melexerus hispidus* (Champion) from Tamazunchale, S.L.P., Mexico. Fig. 2. Dorsal view of same.

Melexerus does not seem to be closely related to any genus or generic group in the subfamily.

***Melexerus hispidus* (Champion), New Combination**
(Figs. 1-7)

Pseudanthonomus hispidus Champion 1903:198 (orig. desc.); Schenkling and Marshall 1934:72 (cat.); Blackwelder 1947:840 (cat.).

Pseudanthonomus crinitus Champion 1910:189 (orig. desc.); Schenkling and Marshall 1934:72 (cat.); Blackwelder 1947:840 (cat.) NEW SYNONYMY.

Body elongate-ovate: ca. 2 x longer than broad; length 1.7-2.1 mm (n=17). Integument dark reddish brown, becoming light reddish on rostrum and tibiae. Vestiture moderately dense, consisting of coarse, gray to ochreous prostrate scales intermixed with suberect to erect pointed scales on dorsum, rostrum and legs, presenting bristly appearance (Figs. 1, 2); ventrally scales decumbent. **Rostrum** (Figs. 6, 7) moderately strongly curved in both sexes but more evenly and slightly more strongly curved in female; as long as prothorax in male, may be slightly longer in female. Male with fairly dense covering of prostrate and suberect scales from base of rostrum to just anterior to point of antennal attachments; in female basal portion

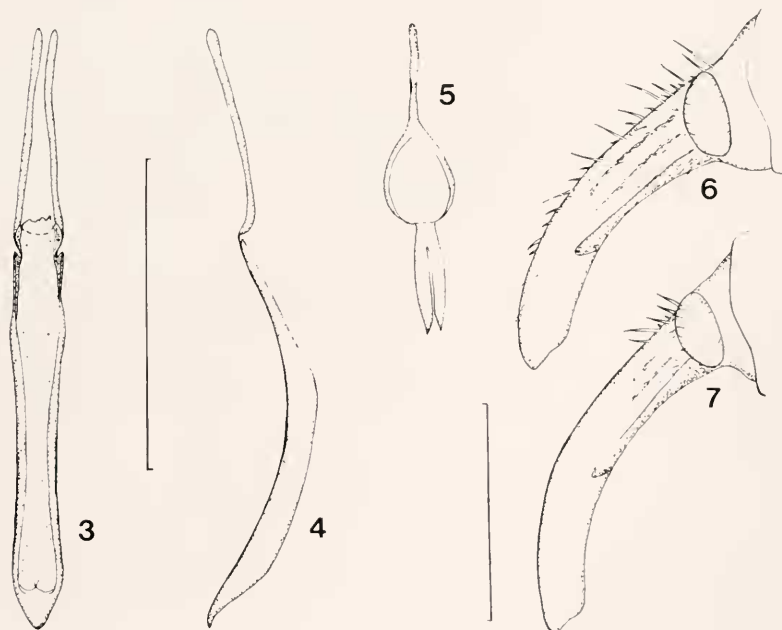


Fig. 3. Dorsal view of male median lobe, Tamazunchale, S.L.P., Mexico. Fig. 4. Lateral view of same. Fig. 5. Dorsal view of basal piece and parameres of male genitalia. Fig. 6. Lateral view of rostrum and head of male, El Salto, S.L.P., Mexico. Fig. 7. Same of female, San Salvador. Lines each equal to 0.5 mm.

of rostrum bearing only a few scattered scales. Rostrum of male distinctly tricarinate dorsally from base to point opposite antennal attachments; female with rostrum merely finely punctate dorsally, subcarinate laterally. Lateral rostral groove well defined dorsally; lower margin lying ventrally on rostrum, not distinct; upper margin impinging on anterior margin of eye at lower one-third; a few scattered elongate scales present in basal portion of lateral groove. **Antennae** attached just before middle of rostrum of female and slightly closer to the apex in male. Scape strongly enlarged in apical one-fourth; moderately strongly bent outward near apex. Funicular segment 1 strongly clavate, *ca.* equal in length to following 3 funicular segments combined; 2 varying from slightly shorter than to as long as 3+4; segment 3 slightly longer than 4; segments 4, 5 and 6 about equal in length, 6 broader. Club elongate-oval: as long as preceding 5 funicular segments combined. **Head** feebly constricted on sides and dorsally behind eyes. Eyes strongly convex, protuberant; height equals nearly 2 x greatest width; separated in front by distance equal to width of rostrum at base. Frons densely covered by coarse scales which conceal fovea. **Prothorax** 1.1-1.3 x wider than long; widest at base; sides more or less evenly converging to apex, with feeble subapical constriction; dorsal surface strongly convex. Coarse hairlike scales dense, completely obscuring integument. **Scutellum** strongly convex; width *ca.* equal to length; densely clothed with gray scales. **Elytra** distinctly wider at base than prothorax. **Humeri** strongly rounded. Sides parallel to past middle thence broadly rounded to apex. Dorsal surface strongly depressed at basal one-third, especially in area of intervals 2 and 3. Intervals strongly convex. Striae deeply impressed. **Procoxae** contiguous. **Mesocoxae** separated by distance equal to *ca.* three-fourths of width of a coxa. **Abdomen** with sternum 1 subequal in length to sterna 2+3; sternum 2 one-third shorter than 1; sterna 3 and 4 equal in length; sternum 5 same length as 2. Scales not as dense ventrally as dorsally. Pygidium not exposed in either sex. **Legs** with prostrate and erect scales sparse, not entirely obscuring integument. Profemur 3.3.-4.0 x longer than broad. Profemoral tooth minute, sharply pointed. Mesofemur usually unarmed, occasionally bearing a minute tooth. Metafemur without tooth. Tibiae short, straight; metatibia about one-half length of femur. Tibiae all minutely mucronate. Tarsal claws each with a long, inner tooth which reaches nearly to apex of claw. **Genitalia** with male median lobe (Figs. 3, 4) slender, membranous dorsally; endophallus bearing minute teeth near apex. Parameres (Fig. 5) elongate.

Discussion: The types of *hispidus* and *crinitus*, the former a female and the latter a male, were examined in the BM(NH) and *crinitus* is here considered to be a junior synonym of *hispidus*. There is considerable sexual dimorphism in the rostra of the two sexes, that of the female being more strongly curved, mostly bare, and relatively longer than that of the male. Based on examination of a larger series of specimens than was available to Champion, the other differences he mentioned appear to be due only to natural variation in the species. Specimens from Jamaica and Cuba differ from Mexican and Central American specimens by having many of the erect dorsal scales split at the apices. The significance of this difference is not apparent but I am unable to find other characters which would indicate that those specimens are specifically distinct from those in Mexico and Central America.

Except for the type localities, San Gerónimo, Guatemala for *hispidus* and San Salvador, El Salvador for *crinitus*, no other distributional data are available for this species in the literature; consequently, the following additional records are presented: CUBA: Soledad, Cienfuegos. JAMAICA:

Trelawny, Duncans. MEXICO: Nayarit-3 mi. NW Santa Maria del Oro. San Luis Potosi-Tamazunchale; 5 mi. SW Tamazunchale; El Salto. Sinaloa-10 mi. N. Mazatlan. Tamaulipas-2 mi. W. Neuvo Morelos; Tampico. Michoacan-20 mi. E. Morelia. Mexico-Tejupico; Temescaltepec.

The only information available on the plant associations of this species is that a specimen was found on a cynipid gall on *Quercus* sp. at Tampico, Mexico.

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